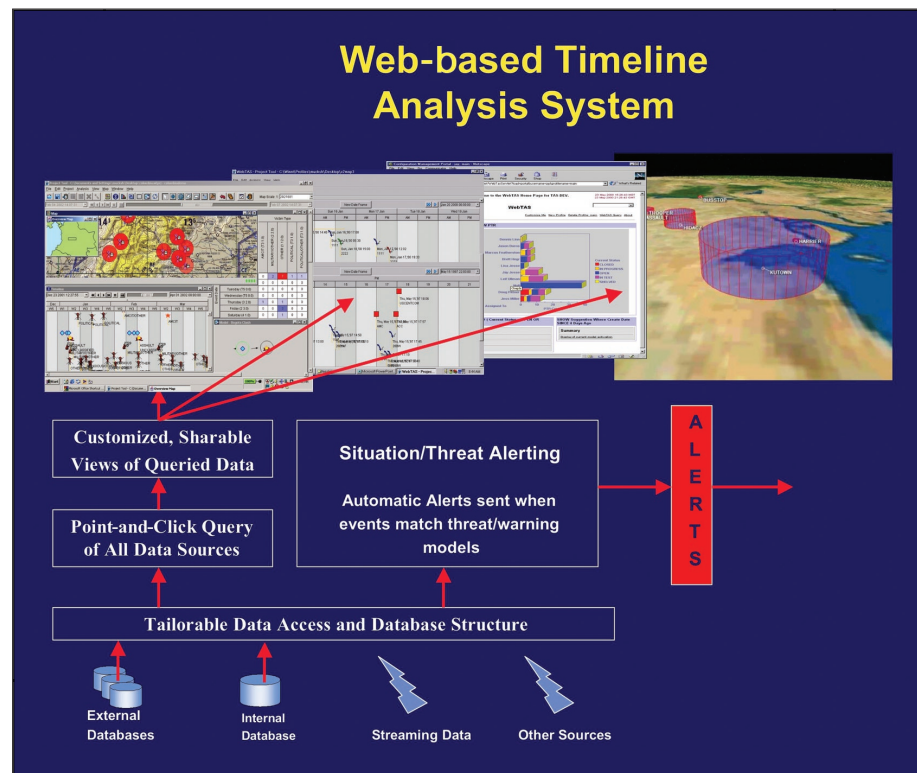# Air Force Research Laboratory|AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

INFORMATION DIRECTORATE'S WEBTAS TECHNOLOGY AIDS IN SHUTTLE PROBE

The Information Directorate-developed, Web-based Timeline Analysis System (WebTAS) allows users to rapidly connect to diverse data sources and combines the data in multiple analytical/visualization tools, with the goal of providing alerts/warnings of developing situations. For example, the WebTAS query tool allows users to build ad-hoc queries with a simple point-and-click interface. WebTAS can display the results in tables, timelines, maps, graphs, histogrids, and Web browsers.

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Accomplishment
The Air Force Space Command's (AFSPC's) Space Analysis Division Team, part of the Department of Defense (DoD) Columbia Investigation Support Team, needed to pinpoint exactly when the ill-fated space shuttle Columbia began to break apart on its return to earth 1 February 2003. The team is using WebTAS to correlate, validate, and visualize multiple databases of DoD sensors and related information from a wide variety of data from different orbital analysis tools to visualize the dynamic nature of Orbiter events across the mission timeline.

AFSPC's Space Analysis Division officials indicated the Columbia project might be the first of several useful applications for WebTAS within the center. The directorate installed WebTAS at the AFSPC Space Analysis Division's Colorado Springs, Colorado facility. AFRL Commander, Major General Paul D. Nielsen, offered WebTAS to members of the Air Force investigative board assisting the National Aeronautics and Space Administration in the Columbia investigation.

Background
WebTAS, a set of analytical tools, allows users to site configure, connect to, and query across multiple databases and other data sources. WebTAS combines data queried across multiple sources in Map, Timeline, Graph, and other displays for analysis.

WebTAS can also set up criteria to aggregate activities over time and space and automatically generate e-mail alerts of unfolding situations. WebTAS is operational at several sites in support of the Global War On Terrorism, Operation IRAQI FREEDOM, Homeland Security/Defense, Air Operations Planning, Special Operations/Special Forces, and other mission areas.

Information
Technology Transfer

Additional information
To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (03-IF-10)